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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/390,435 | 09/07/1999 | JOHN G. SPAKOUSKY | 6479 | 6931 |

25763 7590 05/13/2002

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EXAMINER

TRAN A, PHI DIEU N

ART UNIT PAPER NUMBER

3637

DATE MAILED: 05/13/2002

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/390,435

Applicant(s)

SPAKOUSKY, JOHN G.

Examiner

Phi D A

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17-21, 24, 35, 38, 40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-21, 24, 35, 38, 40 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“arm is vertically displace with...end arms” is indefinite. It is unclear what applicant is trying to claim. How is the center arm vertically displaced? Is it displaced at the same level, above or below the end arms? The claim is examined as best understood.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17, 19, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopkins (1226214).

Hopkins shows a connective structure (5, figure 1) having a plurality of elements forming arms (the connecting part between the dovetail connector), connectors (the dovetail connectors) for connecting the connective structure between the first and the second wall, the connective structure being free of direct, structural connection to any wall of any adjacent block unit when the block unit is in a wall structure (the connectors do not enter any other blocks), the arms

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extending between the first and second walls and supporting at its opposed ends the connectors, the connectors being insert type for dovetail formations in the walls (col. 2 line 28).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, 10-13, 15, 35, 38, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins (1226214) in view of Horobin (4884382) .

Hopkins shows a discrete composite block unit having a first wall (1), a second wall (2), at least one of which is a load bearing for vertical loads and made from masonry-type material, a connective structure connected between the first and the second walls, said connective structure having at least two connectors (one connector on each end of the arm 5), each connectors being connected to the first and second walls respectively (connective structure inherently is capable of connecting the first and second walls together prior to placing on a wall structure), the connective structure being free of direct, structural connection to any wall of any adjacent block unit when the block unit is in a wall structure (the connective structure does not extend into any adjacent block), the connectors being connected by arms which have thermal conduction path of limited vertical cross-sectional area relative to either wall face area, the connectors being insert type connectors which frictionally engage formations on the first and second walls, the connectors having a partition(3) which forms a first cavity with the first wall and a second cavity

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with the second wall, the first cavity being larger than the second cavity (figure 2), at least one center form (3, figure 2) having one side facing the first wall and the other side facing the second wall, arms (5) projecting from either side of the center form, the projection length of one arm is not equal to the projection length of the other arm (the form separating the arm in multiple sections, figure 2), an insulating mass (7) having approximately the same height and width dimensions as the first and second walls, the mass being held by the connective structure and providing a barrier to energy movement between the first and second walls, at least one of the surface of the first or second wall having a surface treatment (inherently so as it is a finished surface).

Hopkins does not disclose the connective structure being plastic.

Horobin discloses connective structure being plastic.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins to show the connective structure being plastic because plastics, metal, concrete etc...are well-known material for making a connective structure.

Hopkins as modified by Horobin shows all the claimed limitations.

5. Claims 2, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Horobin as applied to claim 1 above, and further in view of Smith (4982544).

Hopkins as modified by Horobin shows all the claimed limitations except for arms tapering such that the vertical cross-sectional area of the connective structure decreases as it extends away from the walls toward the center form.

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Smith (figure 1) shows the arms tapering such that the vertical cross-sectional area of the connective structure(15a) decreases as it extends away from the walls (13a, 26a) toward the center to allow for laying of horizontal reinforcing bars.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins's modified structure to show the arms tapering such that the vertical cross-sectional area of the connective structure decreases as it extends away from the walls toward the center form because it would allow for the laying of horizontal reinforcing bars as taught by Smith.

6. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Horobin and Smith (4982544).

Hopkins shows a first wall (1), a second wall (2) of a first masonry-type material interconnected by connectors with arms, a center arm (the middle arm connecting second wall (2) to the first wall (1)), end arms (the outer arms of wall (2)), the center arm being vertically displaced with respect to the end arms, a center form (3) supported on the two end arms and the center arm, the top of the center arm being flushed with the top of the first and second walls.

Hopkins does not show one of the end arm being connected to same wall as the other end arm and the center, the center arm having at least one recess, the connective structure being formed of a second non-masonry-type material.

Horobin discloses connective structures form of plastics

Smith shows end arms and center arm connecting to the first and second walls only, a recess on the center arm to allow for laying of reinforcing bars.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins to show one of the end arm being connected to same wall as the other end arm and the center, the center arm having at least one recess, the connective structure being formed of a second non-masonry-type material because plastics, metal, concrete...are well-known material for making connective structures, and it would have been obvious to modify Hopkins to show the end arms being connected to the first and second walls only and a recess on the center arm since having three or four connecting arms connecting two walls together is well known in the art, and having a recess on the center arm would enable laying of reinforcing bars as taught by Smith.

Hopkins as modified shows all the claimed limitations.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Horobin as applied to claim 1 above, and further in view of Vaughan et al (5709060).

Hopkins as modified by Horobin shows all the claimed limitations except for the connector having sides extending outwardly to be received in a dovetail connector formation in the walls.

Hopkins discloses a connector having one side extending outwardly to be received in a dovetail shaped connector formation in the walls.

Vaughan et al discloses a connector having sides extending outwardly to be received in a dovetail connector formation in the walls.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins' modified structure to show the connector having sides extending outwardly to be received in a dovetail connector formation because a connector having sides to

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be received in a dovetail connector formation is functionally equivalent to a connector having one side to be received in a dovetail connector formation as they both function the same to secure the connectors to the formations in the walls.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Smith (4982544).

Hopkins shows a first wall (1), a second wall (2) of a first masonry-type material interconnected by connectors with arms, a center arm (the middle arm connecting second wall (2) to the first wall (1)), end arms (the outer arms of wall (2)), the center arm being vertically displaced with respect to the end arms, a center form (3) supported on the two end arms and the center arm, the connective structure being integrally formed of a substantially rigid material.

Hopkins does not show one of the end arm being connected to the same wall as the other end arm and the center arm.

Smith shows end arms and center arm connecting to the first and second walls only.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins to show one of the end arm being connected to same wall as the other end arm and the center because having three or four connecting arms connecting two walls together is well known in the art.

Hopkins as modified shows all the claimed limitations.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Stuarts (510720).

Hopkins shows all the claimed limitations except for the connector being generally V-shaped.

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Stuarts shows a generally V-shaped connectors for connecting two walls together.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins to show the connector being generally V-shaped because the examiner takes Official Notice of the equivalence of the V-shape connector and dove-tail shape connector for their use in the wall connecting art and the selection of any of these known equivalents to connect two walls would be within the level of ordinary skill in the art.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Smith.

Hopkins shows all the claimed limitations except for the arms supporting the at least two connectors taper such that vertical cross-sectional area of the connective structure decreases as it extends away from the connectors.

Smith discloses arms supporting the at least two connectors taper such that vertical cross-sectional area of the connective structure decreases as it extends away from the connectors to enable laying of reinforcing bars.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins to show the arms supporting the at least two connectors taper such that vertical cross-sectional area of the connective structure decreases as it extends away from the connectors because it would enable the laying of reinforcing bars as taught by Smith.

11. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins in view of Horobin.

Hopkins as modified by Horobin shows all the claimed limitations except for at least one of the first and second walls being unitary with the connective structure.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hopkins's modified structure to show at least one of the first and second walls being unitary with the connective structure because it has been held that forming in one piece an article which as formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

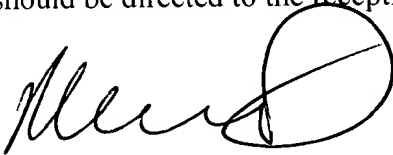
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different block units having connective structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 703-306-9136. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

A handwritten signature in black ink, appearing to read 'Phi Dieu Tran A', with a large circular flourish at the end.

Phi Dieu Tran A
May 2, 2002